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ABSTRACT

The purpose of this study is to establish internal consistency and validity on a survey instrument that has resulted from previous research which examined the perceptions of six teachers as they engaged in the implementation of a nongraded, multiage continuous progress primary program. The need for documentation of student progress was identified by the previous study, and the content of the resulting rating scale represents the perceived benefits of nongradedness. Since the previous research also identified challenges with assessment and the school administration, the rating scale measuring eight different categories was developed to offer teachers of multiage students documentation of the progress students make in multiage classrooms. Using Cronbach's coefficient alpha to measure the internal consistency of the preliminary survey instrument, values ranging from 0.84 to 0.98 were obtained. The preliminary instrument was reduced to 11 questions representing the 8 categories, and this final instrument was assessed for internal consistency, resulting in a Cronbach's alpha of 0.93. An appendix contains instructions to teachers for the study survey. (Contains 4 tables and 16 references.) (Author/SLD)

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The Development of a Rating Scale: Documentation and Nongraded, Multiage Programs

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Abstract

The purpose of this study is to establish internal consistency and validity on a survey instrument that has resulted from previous research which examined the perceptions of six multiage teachers as they engaged in the implementation of a nongraded, multiage continuous progress primary program. The need for documentation of student progress was identified by the previous study and the content of the resultant rating scale represents the perceived benefits of nongradedness. Since the previous research also identified challenges with assessment and the school administration, the rating scale measuring eight different categories is being developed to offer teachers of multiage students documentation of the progress students make in multiage classrooms. Using Cronbach's coefficient alpha to measure the internal consistency of the preliminary survey instrument, values ranging from .84 - .98 were obtained. Once the preliminary instrument was reduced to eleven questions representing the eight categories, this final instrument was assessed for internal consistency, resulting in a Cronbach's alpha of .93.

The Development of a Rating Scale:

Documentation and Nongraded, Multiage Programs

The development of a rating scale evolved as the result of research I have been conducting since 1994 on the implementation of a nongraded, multiage continuous progress primary program. As this program was discontinued, I felt that my examination of the perceived challenges pinpointed one of the main causes of the program's demise: assessment. That is, the decisions that led to the program's termination were decisions that, if proper documentation had been available, might have been different. The development of a rating scale, I believe, would have provided the teachers with the documentation needed to justify the continuation of their program.

Since I have never developed a rating scale before, the purpose of my present study was to develop one that is based upon the results of my first, initial study of the nongraded, multiage program. My intent is to also establish an instrument that was both valid and reliable. Therefore, in the remainder of this paper, I will provide some background to nongradedness before I present the procedures for data collection and a description of the data analysis. Finally, I will discuss the results and limitations regarding this study before presenting questions for further research.

Background

Nongraded, multiage classrooms have enjoyed a rich history in the United States, dating back to the dame schools of colonial times when children of varying ages were placed in the same classroom. The one-room schoolhouse of the 1800s is another example of a nongraded educational setting (Miller, 1991). Presently, the nongraded, multiage approach is experiencing a

resurgence in popularity (Anderson & Pavan, 1993; Gaustad, 1992; Gutloff, 1995; Katz, 1992; Lodish, 1992). This renewed interest in nongradedness may be attributed to three factors: it may be the outgrowth of the progressive movement in education, it enables educators to move toward a more developmentally appropriate program, and nongradedness provides a natural extension to the whole language approach in literacy and the problem solving approach in math (Chase & Doan, 1994).

Many reform efforts have been tried and failed, and much can be learned from studying innovations. From 1994 until the spring of 1997, when the administration discontinued the program, six teachers at Central Elementary, located in a small, Midwestern city, taught in a multiage arrangement. Beginning in the fall of 1994 and ending with the 1996 school year, I conducted a qualitative study that identified the benefits and challenges as perceived by the six primary-grade teachers that were the subjects of my study (O'Connor, 1996). These six teachers all felt strongly that nongradedness would help raise the achievement of the at-risk children they had struggled with in the years preceding this study.

The resultant data from this study indicated seven benefits that the teachers believed were linked with nongradedness (O'Connor, 1996). Four of the seven benefits fit under the umbrella of student satisfaction. First, the teachers felt that children in their multiage classrooms benefited from the supportive environment that characterized their multiage classrooms. The results of this study suggested that as the nongraded teacher strives to keep all of her multiage students on task and actively engaged, it is imperative that students seek help from sources other than the teacher. The six teachers believed that the diversity that existed in their multiage classrooms facilitated an exchange of services among the students. In addition to the teacher, other students were capable

of providing proper support and scaffolding their learning. As one teacher had observed, the multiage classroom was like having "22 teachers in the room" with her. The six teachers felt that because of the increased support they received from one another, students learned to work productively and independently.

Second, the six participants in my study perceived that students in this program had benefited from learning to portray various roles. They felt students had learned to lead, cooperate, help others, and serve as mentors and tutors. Most importantly, some of the teachers pointed out that low ability students were able to assume various roles that, in a traditional classroom, they might not have been exposed to because of their lack of ability. Therefore, all students, not just the bright ones, were able to engage in helping behaviors, the teachers believed. One teacher observed that, regardless of ability, each student eventually achieves the rank and privileges of being an "elder." Thus, for students that enjoy being a helper, a leader, and engaging in other cooperative behavior, the results of this study suggested that such students would benefit from being able to portray these different roles.

Third, the teachers perceived that students' social and emotional development was enhanced by their involvement in this multiage program. The teachers spoke of the relationships and bonding that they had developed with their students. Also, they felt that friendships and filial relationships had been formed among the students. Two of the teachers felt strongly that their children's self esteem had risen as a result of their participation in this program.

Four, the six teachers in this study felt that students benefited from the variety and choice that they were exposed to in their multiage classrooms. Ideally, the nongraded school "strives to increase the variability of individual differences rather than to stress conformity" (Anderson &

Pavan, 1993, p. 76). Similarly, "common assigned tasks encourage, suggest, and allow variability" (Anderson & Pavan, p. 76). The teachers in this study were very aware of the diversity that existed in their classrooms. They felt they encouraged creativity and unique thinking as they recognized the distinctive characteristics of their multiage children. The results of this study indicated that the teachers perceived themselves as facilitators that encouraged children to become more responsible for their own learning and to learn from other children, using a variety of sources.

Equally important, the teachers identified three other three benefits that they believed to be important characteristics of their multiage program. These benefits were categorized as time, knowledge of students, and high expectations. Teachers felt that students benefited simply from being able to spend more time with the same teacher. Not only did they have to spend more individual time with students because of the need to individualize instruction, but also most students would spend two years with the same teacher. A corollary benefit was that teachers perceived that they possessed a greater knowledge of their students. They believed they knew their students well enough to know the best way to proceed with motivating, managing, and instructing these students.

The seventh and final benefit perceived by these teachers was termed high expectations. In teaching for continuous progress and avoiding the grade-imposed limits or ceilings that graded teachers sometimes feel constricted by, these teachers believed that they held high expectations for their students. The best example provided was of the typical first grader that was able to learn higher math skills and time-telling skills, mainly because of the exposure she received during

whole-group instruction and interacting with older, more skilled students. This last benefit could easily be labeled the one-room schoolhouse benefit or the osmosis effect.

This study also identified the many challenges that perplexed these teachers. Two of the most pressing challenges, administrative challenges and challenges with assessments, contributed most heavily to the demise of the program. The teachers believed that they were never able to provide the administration with the type of data that would lend support for the continuation of their program. Notably, the teachers were led by a very supportive principal that was instrumental in making the change to a multiage program during the first year and one-half of the program. However, upon her retirement, a new principal joined their staff during half of the second and all of the third year of the program. This new principal, the teachers believed, was very data driven and positivistic about the types of assessments and the results these assessments should produce.

The other four challenges also might serve as caveats for potential teachers of multiage students. In experiencing curricular and instructional challenges, the teachers grappled with issues surrounding thematic instruction and portraying the role of facilitator. While knowing that the organizational structure of the multiage classroom should include heterogeneous and flexible grouping schemes, most of these teachers still relied on the traditional high, medium, and low ability grouping patterns. These teachers also felt pressed by the need for materials, especially in the areas of instructing emergent readers and instructing for the multiple intelligences.

Lastly, the teachers acknowledged that the complexity of nongradedness was a contributing factor to the challenges they experienced. This, of course, is probably a contributing factor to the demise of this program in 1997. One of the recommendations I posed in my original

research was that because of this complexity, teachers and administrators that are involved in any type of reform effort must proceed with what change theorists describe as a diagnostic approach to problem solving (Fullan & Miles, 1992; Sykes, 1996).

As a result of the study I conducted with the teachers at Central Elementary, I constructed a rating scale to help multiage teachers document the progress of students. The creation of this instrument was driven by the need to demonstrate the effectiveness of multiage programs and the progress of the multiage children. That is, I believe that if the Central teachers had been able to provide data that would document their efforts and the gains of their students, the program might still be in existence. Secondly, this instrument is based upon the findings that present what I believe is the most outstanding outcome of my research: we now have more specific reasons as to why students experience greater degrees of student satisfaction in multiage classrooms (see Pavan, 1992; Pratt, 1983; Way, 1981). The original rating scale is listed as Table 1.

Since the intent of the present study is to develop a rating scale that would help teachers of multiage students document student progress, the first step was to develop an instrument that I would pilot with practicing multiage teachers and an expert evaluator. The following steps were followed in attempting to create a reliable and valid instrument.

1) Outline the content
2) Select the response format
3) Prepare rules for administration
4) Prepare rules for scoring
5) Pilot test the survey instrument (Fink, 1996)

Since the content was derived from my previous research (O'Connor, 1996), the question format was influenced by such content. In looking at the eight different categories that I wanted my rating scale to address, I carefully constructed at least three different categories for each

question, arriving at a total of 39 survey questions for my preliminary instrument (see Table 2). My goal was to pilot these 39 survey questions with practicing multiage age teachers and, from the data they would provide, I could then attempt to select the best items representing these eight categories. Once these final items were selected, I could then assess the internal consistency of the final instrument.

After preparing the preliminary survey instrument and a detailed packet with instructions for the teachers, I met with two teachers at an inner-city, urban school setting to discuss their role in my study. The two teachers have had several years of experience teaching in multiage programs. Presently, the two teachers are organized in multiage families whereby each teacher in the family is the home base teacher for either first, second, or third grade. Therefore, the intent of their school's multiage program is that these two participating teachers will teach in multiage classrooms consisting of children from all three grades.

While meeting with the two teachers, I presented the packet to them, explaining my expectations, my past experiences with multiage programs, and the need for pilot testing my rating scale. The packet included step-by-step directions (see Appendix A) and twelve copies of the preliminary survey instrument. Using a prepared slide presentation, we viewed pictures of students in a multiage setting that were engaging in the types of behaviors discussed in the rating scale. Following Fink's (1996) suggestions, I also made sure the teachers understood how to indicate responses and what the numbers on the Likert scale should indicate as far as their observations of children. For example, I stressed that a "1" meant a child never exhibited a specific behavior and that a "7" meant that a child always exhibited that specific behavior. Thus, the levels between 1 and 7 indicated varying degrees as explicated on the top of each page of the

rating scale

In addition to the two practicing teachers, a former teacher and now a researcher for the National Network for Educational Renewal served as the expert evaluator (Litwin, 1995). As an educator and researcher that has worked closely with multiage teachers, she was able to review the 39 items and evaluate the eight categories and their respective sets of questions in the same manner as the two practicing multiage teachers. Through the advice and comments of the three educators, I sought the answers to the following questions. Are instructions for completing the survey clearly written? Are the choices mutually exclusive and exhaustive? Do respondents have any suggestions for improving the instrument? (Fink, 1996)

From reading the instructions I provided for the teachers, Appendix A, one can ascertain that I was very careful to protect the privacy and confidentiality of the participating students. Students names were recorded in journals that were kept separate from the rating scales, students were identified by numbers only. Within the teacher's packet, I also included a permission slip used by the teachers and the parents or guardians of the participating students.

Data Analysis and Results

Cronbach's coefficient alpha measured the internal consistency for the sets of questions representing each of the eight categories. Since values above .70 are considered to be very good (Litwin, 1995), Table 4 demonstrates that each of the eight categories received very acceptable values, ranging from .84 - .98, as measured by Cronbach's alpha. The Statistical Analysis System (1990), version 6.12, was used for all analyses. Thus, high internal consistency is demonstrated by this data analysis which demonstrated that in answering the sets of questions that related to each category, the teachers answered each separate but related question with a very similar and

consistent rating across the respective category. Once internal consistency was established, the next task at hand was to reduce the 39-question preliminary instrument to a more user-friendly rating scale. Since three educators rendered judgment on the veracity and quality of each item, items selected to represent the eight categories were chosen on the basis of a majority. For example, in choosing the item for the category, Confident Learner, two of the evaluators chose number 24 while the other chose number 37. Therefore, number 24 was selected as the item for the final instrument.

The final instrument, 39 survey questions reduced to 11 survey questions, is a compilation of the scrutinized questions from the preliminary instrument: 2, 6, 10, 11, 18, 25, 27, 28, 29, 32, and 33. These new eleven questions are listed as Table 5. Using the new eleven questions, another Cronbach's alpha was performed on the final instrument. The resultant data indicated an alpha level of .0.93. This analysis indicated that the new set of questions were also consistent among themselves for rating student progress. Thus, the final instrument is also said to have internal consistency.

Discussion

Based on my opinion and experiences of the three experts utilized in this study, I am pleased with the results of this study and confident that an instrument has been developed that will serve as documentation for teachers in multiage settings. The final eleven question items relate to what previous research has indicated about multiage programs and what practicing multiage teachers believe about the benefits of multiage instruction. Few could argue that cooperation, interpersonal skills, and decision making are desirable outcomes for children. Similarly, learning to portray a variety of roles, approaching new tasks with confidence, and supporting and seeking

knowledge acquisition are life skills that most educators strive to attain with students. Lastly, since teaching for continuous progress should be the goal of every teacher, the items that refer to the student as reaching his/her full potential are critical for causing the teacher to reflect on the progress of the children. Since this scale was devised for primary children, other content area, such as social studies and science, were not addressed and it is very likely that, in the future, such content could be added.

Lastly, the concern for reliability is still a work in progress. The practicing teachers will receive copies of the final instrument to once again rate the same students rated for during the pilot study. Once this has been completed, test retest reliability can be established if the teachers rate the students in a manner consistent with the initial rating, producing data that are reproducible, stable, and therefore reliable.

Limitations

I would be more comfortable with a larger number of evaluators. Also, the three evaluators that I used were educators that had a great deal of experience with multiage programs. For this reason, I value their input regarding the items on the rating scale. However, not every teacher that will ever use this rating scale will have the experience these educators possess. For this reason, the opinions and perceptions of more educators with a variety of experiences would have been helpful. As more teachers use this rating scale, I will require that they report their results to me so that I may continue to establish internal consistency with the eleven items listed on the new scale.

Secondly, the two multiage teachers are not yet teaching in the ideal multiage setting. Students are still placed in traditional, graded "home bases" and only merge with their multiage

families for a portion of the school day. The students that were sampled for this study range from the ages of 73 months to 102 months so their ages do represent a typical multiage population of 6 years to 8 years. However, when the teachers rated their ten students from their class, they selected these students from their "home base" and therefore rated students that existed, during part of a day, in a graded arrangement. Ideally, the students rated should be in a multiage classroom for most of the day and not for just one or two subjects. This was a limitation that the teachers themselves were not very happy about, they, too, wanted to spend more of their time teaching in a multiage arrangement.

Questions for Further Research

As I continue to conduct research in this area, I continue to raise the following concerns. As teachers attempt to document their progress with multiage students, does such documentation aid them in defending their program? Are there any other items or benefits of teaching in a multiage classroom, in addition to the eight categories this rating scale addresses, that should be included on a rating scale? When comparing students from a multiage classroom with students in a traditional, graded classroom, will any of the eight categories emerge as being areas in which students in multiage programs possess higher ratings? For example, are students in multiage classrooms more supportive, cooperative, better leaders and followers, and better at making decisions? Do students in multiage classrooms have higher interpersonal skills and more confidence when faced with new tasks? Do these same multiage students come closer to achieving their full potential in academic areas and are they able to seek genuine help from others that is more than just copying answers? Lastly, in the hopes that many others will help me in

improving the rating scale, I ask. Is this a valid and reliable instrument for assessing the progress of students in a nongraded, multiage classroom?

In summary, the original benefits and challenges that were idenitified by the six Central teachers (O'Connor, 1996) served as the impetus for the instrument that was developed for this study. Through continued research, I remain hopeful that a valid and reliable instrument will be developed that can aid multiage teachers as they strive to deliver a curriculum that is child centered. According to John Goodlad and Robert Anderson (1987), who have been studying nongradedness since the 1950s, the study of nongradedness is "rarely accompanied by a systematic scheme for evaluating the effectiveness" (p. 209). Therefore, I contend that this rating scale is a much-needed step toward an effective evaluation method.

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Table 1

The Original Rating Scale

Child's Name_____

Items should be rated on the 7-point scale in reference to the frequency in which it has been observed that students exhibit the following characteristics.

Never	*Sometimes*			*Usually*		*Always*
1	2	3	4	5	6	7

	Never	*Sometimes*			*Usually*		*Always*
1. Student supports others by hinting rather than telling answers.	1	2	3	4	5	6	7
2. Student seeks genuine help that is more than copying answers.	1	2	3	4	5	6	7
3. Student is able to portray various roles of leader, follower, etc.	1	2	3	4	5	6	7
4. Student focuses more on cooperating rather than competing.	1	2	3	4	5	6	7
5. Student makes friends easily.	1	2	3	4	5	6	7
6. Student is confident enough to try new things.	1	2	3	4	5	6	7
7. Student enjoys making choices.	1	2	3	4	5	6	7
8. Student is making continuous progress in academic areas.	1	2	3	4	5	6	7

COMMENTS:

SIGNATURE:_____ DATE:_____

Table 2

Preliminary Rating Scale

Student's Identification Number: _____ Student's D.O.B. ____ Date of Testing: _____Age ___years ___ months Gender: ___
Family Type: _____ Sibling Rank: _____Socioeconomic Level _____
Number of months spent in teacher's class: _____ Teacher's Name and Evaluator: _____

Items should be rated according to the 7-point scale in reference to the frequency in which it has been observed that the student exhibits the following behaviors and characteristics.

7 - **Always** *(Student exhibits behavior without exception)*
6 - **Very often** *(Student exhibits behavior consistently but not always)*
5 - **Fairly often** *(Student exhibits behavior more than half the time but not in a consistent manner)*
4 - **Half of the time** *(Student exhibits behavior 50% of time)*
3 - **Sometimes** *(Student exhibits behavior less than half of the time but on certain occasions)*
2 - **Almost Never** *(Student exhibits behavior on very rare occasions)*
1 - **Never** *(Student has never exhibited behavior)*

1 The student facilitates other students' learning	1	2	3	4	5	6	7
2 The student attempts to engage in cooperative rather than competitive behaviors in the classroom	1	2	3	4	5	6	7
3 The student makes decisions easily	1	2	3	4	5	6	7
4 The student is capable of instructing others	1	2	3	4	5	6	7
5 The student is capable of asking for help from other students that increases knowledge and understanding	1	2	3	4	5	6	7
6 The student exhibits adequate interpersonal skills	1	2	3	4	5	6	7
7 The student is a very supportive member of the classrooms' total learning environment	1	2	3	4	5	6	7
8 The student is a productive member of cooperative learning activities	1	2	3	4	5	6	7
9 The student is amiable and liked by others	1	2	3	4	5	6	7
10 The student is able to assume the role of leader when appropriate	1	2	3	4	5	6	7
11 The student approaches new tasks with confidence	1	2	3	4	5	6	7

Table 2, continued							
12 The student knows that merely copying answers does not increase understanding of concepts	1	2	3	4	5	6	7
13 The student's classroom demeanor is cooperative rather than competitive	1	2	3	4	5	6	7
14 The student is progressing according to ability in the area of mathematics and arithmetic	1	2	3	4	5	6	7
15 The student is progressing according to ability in the area of reading	1	2	3	4	5	6	7
16 The student is progressing according to ability in the area of writing compositions	1	2	3	4	5	6	7
17 The student demonstrates the ability to assume a variety of roles in the classroom	1	2	3	4	5	6	7
18 The student is able to assume to role of follower when appropriate	1	2	3	4	5	6	7
19 The student is willing to attempt novel activities	1	2	3	4	5	6	7
20 The student is able to assume to role of tutor when necessary	1	2	3	4	5	6	7
21 The ability of the student corresponds to the level of progress being made in arithmetic and mathematics	1	2	3	4	5	6	7
22 The ability of the student corresponds to the level of progress being made in reading	1	2	3	4	5	6	7
23 The ability of the student corresponds to the level of progress being made in writing compositions	1	2	3	4	5	6	7
24 The student exhibits a "can-do attitude" when faced with new tasks	1	2	3	4	5	6	7
25 The student is a capable decision maker	1	2	3	4	5	6	7
26 The student is able to assume the role of tutee when necessary	1	2	3	4	5	6	7
27 The student is reaching his/her full potential in the area of arithmetic and mathematics	1	2	3	4	5	6	7
28 The student is reaching his/her full potential in the area of reading	1	2	3	4	5	6	7

Table 2, continued							
29 The student is reaching his/her full potential in the area of writing compositions	1	2	3	4	5	6	7
30 The student makes choices with little trepidation	1	2	3	4	5	6	7
31 The student has a positive attitude toward learning	1	2	3	4	5	6	7
32 Student supports others by hinting rather than telling answers	1	2	3	4	5	6	7
33 Student seeks genuine help that is more than copying answers	1	2	3	4	5	6	7
34 Student is able to portray a variety of roles such both leader and follower	1	2	3	4	5	6	7
35 Student focuses more on cooperating rather than competing	1	2	3	4	5	6	7
36 Student makes friends easily	1	2	3	4	5	6	7
37 Student is confident enough to try new things	1	2	3	4	5	6	7
38 Student enjoys making choices	1	2	3	4	5	6	7
39 Student is making continuous progress in academic areas	1	2	3	4	5	6	7

Table 3

Soliciting Evaluator Input

Teacher Analysis of Rating Scale Items	**Answer:**
a) For numbers 1,4,7, and 32 in **Section I,** which item do you think is the most discerning and articulate for evaluating whether a student is able to scaffold and support other students' learning? ☞	
b)For numbers 5, 12, and 33 in **Section I**, which item do you think is the most discerning and articulate for evaluating whether a student is able to seek help from others that is meaningful and not just copying answers? ☞	
c) Choose from the following items to answer this next question. 10 and 18, 20 and 26, just 17; or just 34. In **Section I**, which item or pair of items do you think is the most discerning and articulate for evaluating whether a student is able to portray a variety of roles, such as teacher, student, leader, follower, in the classroom setting? ☞	
d) For numbers 2, 8, 13, and 35 in **Section I**, which item do think is the most discerning and articulate for evaluating whether a student is more cooperative versus competitive in the classroom setting? ☞	
e) For numbers 6, 9, and 36 **Section I**, which item do think is the most discerning and articulate for evaluating whether a student is developing socially and emotionally? ☞	
f) For numbers 11, 19, 24, 31, 37 in **Section I**, which item do you think is the most discerning and articulate for evaluating whether a student is a confident learner? ☞	
g) For numbers 3, 30, 25, and 38 in **Section I**, which item do you think is the most discerning and articulate for evaluating whether a student is capable of making choices and decisions? ☞	
h) Choose from the following items to answer this next question. 14, 15, and 16, 21, 22, and 23, 27, 28, and 29, or just 39. In **Section I**, which item or pair of items do you think is the most discerning and articulate for evaluating whether a student is making the type of progress that you, as a teacher who knows the child's ability and potential, should realistically expect the child to make? ☞	

Table 4

Cronbach's Alpha for Eight Categories of Preliminary Survey Questions

Category	Question Numbers	Cronbach's Alpha
Scaffold and Support Learning	1, 4, 7, 32	0 92
Seeks Meaningful Help	5, 12, 33	0 84
Portrays Variety of Roles	10 & 18, 20 & 26, 17, 34	0 86
Cooperative or Competive Attitude	2, 8, 13, 35	0 96
Social and Emotional Development	6, 9, 36	0 93
Confident Learner	11, 19, 24, 31, 37	0 97
Capable Decision Maker	3, 25, 30, 38	0 96
Evaluating Academic Progress	14, 15 & 16, 21, 22 & 23, 27, 28 & 29, 39	0 98

Table 5

The Final Instrument

Student's Identification Number: _____ Student's D.O.B: ____ Date of Testing: _____Age: ___years ___ months Gender: ____

Family Type: _____ Sibling Rank: _____Socioeconomic Level:_____

Number of months spent in teacher's class: _____ Teacher's Name and Evaluator: _____

Items should be rated according to the 7-point scale in reference to the frequency in which it has been observed that the student exhibits the following behaviors and characteristics.

7 - Always *(Student exhibits behavior without exception)*
6 - Very often *(Student exhibits behavior consistently but not always)*
5 - Fairly often *(Student exhibits behavior more than half the time but not in a consistent manner)*
4 - Half of the time *(Student exhibits behavior 50% of time)*
3 - Sometimes *(Student exhibits behavior less than half of the time but on certain occasions)*
2 - Almost Never *(Student exhibits behavior on very rare occasions)*
1 - Never *(Student has never exhibited behavior)*

1. The student attempts to engage in cooperative rather than competitive behaviors in the classroom.	1	2	3	4	5	6	7
2. The student exhibits adequate interpersonal skills.	1	2	3	4	5	6	7
3. The student is able to assume the role of leader when appropriate	1	2	3	4	5	6	7
4. The student is able to assume to role of follower when appropriate.	1	2	3	4	5	6	7
5. The student approaches new tasks with confidence.	1	2	3	4	5	6	7
6. The student is a capable decision maker.	1	2	3	4	5	6	7
7. The student supports others by hinting rather than telling answers.	1	2	3	4	5	6	7
8. The student seeks genuine help that is more than copying answers.	1	2	3	4	5	6	7
9. The student is reaching his/her full potential in the area of arithmetic and mathematics.	1	2	3	4	5	6	7
10. The student is reaching his/her full potential in the area of reading	1	2	3	4	5	6	7
11. The student is reaching his/her full potential in the area of writing compositions.	1	2	3	4	5	6	7

Appendix A

Instructions to Teachers

1. In your journal, please describe your classroom population. Describe your students according to a variety of characteristics such as chronological age, ability levels, gender, race, socioeconomic status, family compositions, and any other factors that you deem important.

2. Select ten students to rate using the proposed rating scale. The ten you rate should be indicative of your total classroom population. For example, if half of your students are boys, then five of the ten you select should be boys; if 40% of your students are the youngest and/or new to your class, then four of the ten you select should follow this characteristic also. If 10% of your class, or 3 out of 30, are identified as being gifted, then one of the ten you select should also be identified as being gifted.

3. Using the enclosed permission slip, obtain parental permission.

4. In your journal, list the names of the ten students you have selected and describe them according to the aforementioned characteristics and any others you deem important.

5. In your journal, assign a number to each student **beginning with ____ and ending with ____**

6. To protect the confidentiality and privacy of all students, identify them according to the assigned number only. Their name and other information should be listed in your journal. For example, Billy Jones becomes student number 101.

7. Whenever you feel comfortable with the contents of the rating scale and whenever you feel knowledgeable enough about your students to evaluate them, do so. Please note you will only complete

Appendix A, continued

Section II (*this refers to another research agenda*) one time only as it relates to just **you and your experiences** as a multiage teacher.

8. As you evaluate your students using the rating scale, record your general observations and comments in your journal at any time during the process. For example, you might list your reactions to the items, any problems you had interpreting an item, or any problems or strengths that you perceive as being inherent in the instrument. At the minimum, please make at least two entries.

9. Please read the rating scale again and answer the questions listed in the following table. (*After following the instructions listed as number nine, the teachers were asked to respond to the questions represented by Table 3*).